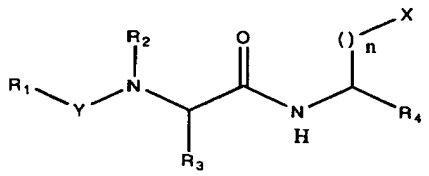
We claim:

1. A cell adhesion inhibitory compound of formula (I):



(I)

or a pharmaceutically acceptable salt thereof, wherein:

X is selected from the group consisting of $-CO_2H$, $-SO_2R_5$, and $-SO_3H$;

Y is -CO-;

R_1 is selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, cycloalkyl-substituted alkyl, cycloalkenyl-substituted cycloalkyl, alkoxy, alkenoxy, alkynoxy, alkylamino, alkenylamino, alkynylamino, N-alkylurea-substituted alkyl, alkylcarbonylamino-substituted alkyl, and aminocarbonyl-substituted alkyl;

R_2 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, and cycloalkenyl;

R_3 is selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, hydroxy-substituted alkyl, alkoxy-substituted alkyl, amino-substituted alkyl, thiol-substituted alkyl, alkylsulfonyl-substituted alkyl, (hydroxy-substituted alkylthio)-substituted alkyl, thioalkoxy-substituted alkyl, acylamino-substituted alkyl, alkylsulfonylamino-substituted alkyl, [N-(alkyl, alkenyl or alkynyl)-or N,N-[dialkyl, dialkenyl, dialkynyl or (alkyl,alkenyl)-amino]carbonyl-substituted alkyl, carboxyl-substituted alkyl, and amino acid side

chains selected from arginine, asparagine, glutamine, S-methyl cysteine, methionine and corresponding sulfoxide and sulfone derivatives thereof, glycine, leucine, isoleucine, allo-isoleucine, tert-leucine, norleucine, alanine, ornithine, glutamine, valine, threonine, serine, aspartic acid, beta-cyanoalanine, and allothreonine;

R_4 is selected from the group consisting of alkyl, cycloalkyl, alkenyl, cycloalkenyl, and alkynyl; and

n is 0, 1 or 2.

2. The cell adhesion inhibitory compound according to claim 1, wherein R_1 is selected from the group consisting of cyanomethyl, cyclohexylmethyl, methyl, n-hexyl, t-butoxy, t-butylamino, 5-(N'-t-butylurea)pentyl, and 2,2-dimethylpropyl.

3. The cell adhesion inhibitory compound according to claim 1, wherein R_2 is hydrogen or methyl.

4. The cell adhesion inhibitory compound according to claim 3, wherein R_2 is hydrogen.

5. The cell adhesion inhibitory compound according to claim 1, wherein R_3 is selected from the group consisting of 2-(methylsulfonyl)-ethyl, 3-(hydroxy-propylthio)-methyl, 4-(methylsulfonylamino)-butyl, 4-acetylaminobutyl, aminomethyl, butyl, hydroxymethyl, isobutyl, methyl, methylthiomethyl, propyl, N,N-(methylpropargyl)-amino, 2-(methylthio)-ethyl, 2-(N,N-dimethylamino)-ethyl, 4-amino-butyl, t-butoxy-carbonylaminomethyl, sec-butyl, t-butyl, N,N-dimethyl-aminocarbonylmethyl, 1,1-ethano, 1-

hydroxyethyl, 1-methoxyethyl, carbonylmethyl, 2-methylsulfinylethyl, and asparagine side-chain.

6. The cell adhesion inhibitory compound according to claim 5, wherein R_3 is selected from the group consisting of isobutyl, 2-(methylthio)-ethyl, 3-(hydroxypropylthio)-methyl, 2-(methylsulfonyl)-ethyl and 4-acetylamino-butyl, 4-(methylsulfonylamino)-butyl.

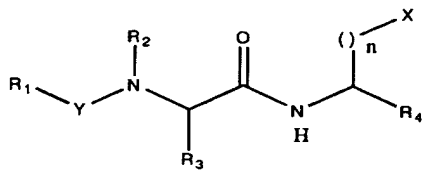
7. The cell adhesion inhibitory compound according to claim 1, wherein R_4 is methyl.

8. The cell adhesion inhibitory compound according to claim 1, wherein Y is -CO-, $-CH_2-$ or $-SO_2-$.

9. The cell adhesion inhibitory compound according to claim 8, wherein Y is -CO-.

10. The cell adhesion inhibitory compound according to claim 1, wherein n is 1.

11. A pharmaceutical composition comprising a cell adhesion inhibitory compound of formula (I):



(I)

or a pharmaceutically acceptable salt thereof, wherein:

X is selected from the group consisting of $-CO_2H$,

$-SO_2R_5$, and $-SO_3H$;

Y is -CO-;

R_1 is selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, cycloalkyl-substituted alkyl, cycloalkenyl-substituted cycloalkyl, alkoxy, alkenoxy, alkynoxy, alkylamino, alkenylamino, alkynylamino, N-alkylurea-substituted alkyl, alkylcarbonylamino-substituted alkyl, and aminocarbonyl-substituted alkyl;

R_2 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, and cycloalkenyl;

R_3 is selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, hydroxy-substituted alkyl, alkoxy-substituted alkyl, amino-substituted alkyl, thiol-substituted alkyl, alkylsulfonyl-substituted alkyl, (hydroxy-substituted alkylthio)-substituted alkyl, thioalkoxy-substituted alkyl, acylamino-substituted alkyl, alkylsulfonylamino-substituted alkyl, [N-(alkyl, alkenyl or alkynyl)-or N,N-[dialkyl, dialkenyl, dialkynyl or (alkyl,alkenyl)-amino]carbonyl-substituted alkyl, carboxyl-substituted alkyl, and amino acid side chains selected from arginine, asparagine, glutamine, S-methyl cysteine, methionine and corresponding sulfoxide and sulfone derivatives thereof, glycine, leucine, isoleucine, allo-isoleucine, tert-leucine, norleucine, alanine, ornithine, glutamine, valine, threonine, serine, aspartic acid, beta-cyanoalanine, and allothreonine;

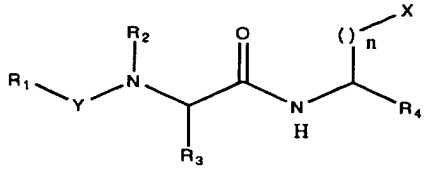
R_4 is selected from the group consisting of alkyl, cycloalkyl, alkenyl, cycloalkenyl, and alkynyl; and

n is 0, 1 or 2;

in an amount effective for prevention, inhibition or suppression of cell adhesion;

and a pharmaceutically acceptable carrier.

12. A method of preventing, inhibiting or suppressing cell adhesion in a mammal comprising the step of administering to said mammal a pharmaceutical composition comprising an effective amount of a cell adhesion inhibitory compound of formula (I):



(I)

or a pharmaceutically acceptable salt thereof, wherein:

X is selected from the group consisting of $-CO_2H$, $-SO_2R_5$, and $-SO_3H$;

Y is -CO-;

R_1 is selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, cycloalkyl-substituted alkyl, cycloalkenyl-substituted cycloalkyl, alkoxy, alkenoxy, alkynoxy, alkylamino, alkenylamino, alkynylamino, N-alkylurea-substituted alkyl, alkylcarbonylamino-substituted alkyl, and aminocarbonyl-substituted alkyl;

R_2 is selected from the group consisting of hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, and cycloalkenyl;

R_3 is selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, hydroxy-substituted alkyl, alkoxy-substituted alkyl, amino-substituted alkyl, thiol-substituted alkyl, alkylsulfonyl-substituted alkyl, (hydroxy-substituted alkylthio)-

substituted alkyl, thioalkoxy-substituted alkyl, acylamino-substituted alkyl, alkylsulfonylamino-substituted alkyl, [N-(alkyl, alkenyl or alkynyl)-or N,N-[dialkyl, dialkenyl, dialkynyl or (alkyl,alkenyl)-amino]carbonyl-substituted alkyl, carboxyl-substituted alkyl, and amino acid side chains selected from arginine, asparagine, glutamine, S-methyl cysteine, methionine and corresponding sulfoxide and sulfone derivatives thereof, glycine, leucine, isoleucine, allo-isoleucine, tert-leucine, norleucine, alanine, ornithine, glutamine, valine, threonine, serine, aspartic acid, beta-cyanoalanine, and allothreonine;

R_4 is selected from the group consisting of alkyl, cycloalkyl, alkenyl, cycloalkenyl, and alkynyl; and

n is 0, 1 or 2;

and a pharmaceutically acceptable carrier.

13. The method according to claim 12 wherein said method is used for preventing, inhibiting or suppressing cell adhesion-associated inflammation.

14. The method according to claim 12, wherein said method is used for preventing, inhibiting or suppressing a cell adhesion-associated immune or autoimmune response.

15. The method according to claim 12, wherein said method is used to treat or prevent a disease selected from the group consisting of asthma, arthritis, psoriasis, transplantation rejection, multiple sclerosis, diabetes and inflammatory bowel disease.